

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-71 and insert new claims 72-90.

72. (New) A controlled-release composition for topical application to a substrate, said composition comprising: an oil-in-water emulsion substantially free of lipophilic solvent and formed by mechanical inversion of a water-in-oil emulsion; and an active agent comprising a protein incorporated into said emulsion.

73. (New) A controlled-release composition as set forth in claim 72 wherein said emulsion has a hydrophilic phase comprising said active agent, water, and a carrier, and a hydrophobic phase comprising a silicone component.

74. (New) A controlled-release composition as set forth in claim 73 further comprising a surfactant between said hydrophilic and hydrophobic phases.

75. (New) A controlled-release composition as set forth in claim 73 wherein said carrier is selected from the group of glycerin, propylene glycol, polyethylene glycol, poloxamer, alcohol, polyhydric alcohol, water, polyvinyl alcohol, polyvinylpyrrolidone, and combinations thereof.

76. (New) A controlled-release composition as set forth in claim 73 wherein said carrier is in solution with said water.

77. (New) A controlled-release composition as set forth in claim 72 wherein said protein is an enzyme.

78. (New) A controlled-release composition as set forth in claim 77 wherein said enzyme is selected from the group of natural enzymes, synthetic enzymes, engineered enzymes, and combinations thereof.

79. (New) A controlled-release composition as set forth in claim 77 wherein said enzyme is selected from the group of oxidoreductases, transferases, isomerases, ligases, hydrolases, cutinases, oxidases, reductases, hemicellulases, esterases, pectinases, lactases, peroxidases,

laccases, catalases, antibodies, polypeptides, peptides, hormones, cytokines, growth factors, biological modulators, and combinations thereof.

80. (New) A controlled-release composition as set forth in claim 77 wherein said enzyme comprises Protease A, Protease B, or LG12.

81. (New) A controlled-release composition as set forth in claim 74 further comprising a dispersing agent for dispersing said active agent.

82. (New) A controlled-release composition as set forth in claim 81 wherein said dispersing agent comprises a silicone-based surfactant different from said surfactant.

83. (New) A controlled-release composition as set forth in claim 73 wherein said silicone component is selected from the group consisting of a silicone gum, a silicone rubber, a silicone elastomer, a silicone resin, high molecular weight silicones, silicone emulsions, and combinations thereof.

84. (New) A controlled-release composition as set forth in claim 73 wherein said silicone component comprises a pressure sensitive adhesive.

85. (New) A controlled-release composition as set forth in claim 84 wherein said pressure sensitive adhesive comprises the reaction product of; a hydroxy endblocked polydimethylsiloxane polymer, and a hydroxy functional silicate resin.

86. (New) A controlled-release composition as set forth in claim 85 wherein said hydroxy functional silicate resin is further defined as a trimethylsiloxy and hydroxy endblocked silicate resin.

87. (New) A controlled release composition as set forth in claim 72 in the form of a multi-layer dressing for topical application to a substrate, said dressing comprising: (A) a controlled-release layer formed from said controlled-release composition of claim 72; (B) an adhesive layer disposed adjacent said controlled-release layer for adhering said dressing to the substrate; and

(C) an additional layer selected from the group of a backing layer, a cushioning layer, an absorbent layer, a second adhesive layer, and combinations thereof.

88. (New) A controlled release composition as set forth in claim 87 wherein said controlled-release layer is adjacent the substrate and said additional layer is disposed adjacent said adhesive layer spaced from said controlled-release layer.

89. (New) A controlled release composition as set forth in claim 87 wherein said controlled-release layer is dry in said dressing such that said controlled-release layer is free of water after said controlled-release layer is formed by said controlled-release composition.

90. (New) The use of the controlled release composition of claim 72 for the manufacture of a multi-layer dressing for topical application to a substrate.